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(54) **INSULATED-GATE PHOTOCONDUCTIVE SEMICONDUCTOR SWITCH**

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(57) **ABSTRACT**

This present invention provides a novel photoconductive semiconductor switch (PCSS) comprising: a semi-insulating substrate, an anode formed on the upper surface of said semi-insulating substrate, a first n-type doped layer formed on the lower surface of said semi-insulating substrate, a p-type doped layer formed on said first n-type doped layer, a second n-type doped layer formed on said p-type doped layer, a cathode formed on said second n-type doped layer, several recesses facing towards said first n-type doped layer and vertically extending into a part of said first n-type doped layer, an insulating layer formed on said second n-type doped layer and on the walls and the bottoms of said recesses, a gate electrode consisting of two parts, one part of the which formed on said insulating layer on the walls and the bottoms of recesses, and the other part of the which formed on a part of the insulating layer on the second n-type doped layer for electrically connecting the part of the gate
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